

# 4262

Diag. Cht. Nos. 8201-3 & 8152-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey *Hydrographic*  
Field No. \_\_\_\_\_ Office No. *4262*

LOCALITY  
State *Alaska*  
General locality *West Coast of*  
Locality *Prince of Wales*  
*Island*

1922

CHIEF OF PARTY

*J. J. Maher*

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

B-1870-1 (1)++

# 4262

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
Col. E. Lester Jones, Director.

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LIBRARY  
MAGNETISM

4262

Descriptive Report  
To Accompany  
Hydrographic Smooth Sheet, El Capitan  
Pass, S. E. Alaska.

U. S. S. SURVEYOR  
1922.

Thos. J. Maher,  
H. & G. E.,  
Chief of Party.

## DESCRIPTIVE REPORT

to accompany

Hydrographic Smooth Sheet #7, El Capitan Pass, S.E. Alaska

### General Description of Coast:

Both shores are rocky throughout the length of this sheet, the land rising gradually from the shores, heavily timbered.

### Limits of Sheet:

This sheet includes a hydrographic survey of that portion of El Capitan Pass between latitude 56-00' and latitude 56-03'-30", on a scale of 1:10,000.

### Depths and Character of Bottom:

In depths of less than 50 fathoms the bottom is rocky, changing to a soft mud bottom at 50 fathoms and over. In the upper half of this hydrographic sheet there is a depth of from 75 to 116 fathoms in the center of the pass, the bottom dropping off rapidly from the East Side except in the bight at Camp Taylor anchorage in the vicinity of Signal ~~Halls~~ and Signal Can where the water is comparatively shallow. Along the West shore the bottom drops off more gradually and in the vicinity of triangulation station El there is a depth of 5 to 8 fathoms with rocky bottom.

The lower half of the sheet has the line of greatest depth, from 75 to 45 fathoms; but at the extreme Southern end of the sheet the greatest depth lies nearer the Eastern shore. In the lower half of this sheet were found two spots of critical depth - one with a minimum depth of 46 fathoms with rocky bottom, 1150 meters 148 degrees true from Signal Way and a spot with a minimum depth of 13<sup>11</sup> fathoms, 729 meters 123 degrees true from Signal Way. No less depths at these two points were found during development. With the exception of these two points the center line of that portion of El Capitan Pass covered by this sheet is a clear channel, and these two points can be avoided by favoring the Eastern shore.

Dangers and Rocks:

The triangulation stations El, Cap, and Tan are situated on rocks all of which show at mean high water and are dangerous to boats running along close to shore at night. For a distance of 90 meters West and South of triangulation station Tan and from Tan to shore there are a number of rocks which bare at various stages of the tide. In the vicinity of Signal See and Signal By there are a number of rocks which bare at various stages of the tide. Along the West shore from Signal Way to Signal Group are numerous rocks which bare at various stages of the tide, extending out from shore for a distance varying from 30 meters to 140 meters.

Incompleted Areas:

It was impossible to complete this sheet, due to lack of time. The incompleted areas include a thorough development of the water in the vicinity of triangulation station El and the survey of the area left blank for about 360 meters South of triangulation station El. About triangulation station Cap and North of Cap for a distance of 640 meters, and along the East shore between Signal Del and Signal Bed for a distance of 250 meters from shore, and in the vicinity of Camp Taylor (Signals Hams and Can) the hydrography has not been done. The small area about triangulation station Tan and South and East of triangulation station Tan requires further development.

Currents:

The tidal currents run North and South throughout the sheet with the flood and ebb, running North with the flood and South with the ebb.

Respectfully Submitted,

A. G. Katz.

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A.G.Katz, Hydr. & Geod. Engr.

# Plane Table Positions.

Object and Description	Latitude	D. M.	Longitude	D. P.	Remarks.
Tie	56 00	04.8	133 15	966.9	
		1850.9		73.0	
ee	56 00	84.7	133 15	880.6	
		1771.0		159.3	
Dew	56 00	123.1	133 15	813.1	
		1732.6		226.8	
Won	56 00	180.0	133 15	782.6	
		1675.7		257.3	
Roy	56 00	292.3	133 15	606.7	
		1563.4		433.2	
Bog	56 00	216.6	133 15	525.6	
		1639.1		514.3	
Cab	56 00	699.5	133 15	537.6	
		1156.2		502.3	
Sun	56 00	836.0	133 15	532.2	
		1019.7		507.6	
Bob	56 00	873.3	133 15	511.6	
		982.4		528.2	
R. p	56 00	1061.2	133 15	385.2	
		794.5		654.5	
Coff	56 00	1302.1	133 15	372.9	
		553.6		666.8	
Sen	56 00	1571.0	133 15	340.4	
		284.7		699.2	
Sax	56 00	1565.8	133 15	565.5	
		289.9		474.1	
Mor	56 00	1680.4	133 15	544.8	
		175.3		494.8	
Wash	56 00	1617.0	133 15	660.9	
		238.7		378.6	
By	56 00	1736.4	133 15	436.3	
		119.3		603.2	
See	56 01	152.9	133 15	387.2	
		1702.8		652.3	
leck	56 01	283.0	133 15	111.7	
		1572.7	133 15	927.8	
Star	56 01	279.0	133 15	447.4	
		1576.7		592.1	
Del	56 01	902.7	133 15	669.5	
		953.0		369.8	
Mid	56 01	1209.4	133 15	589.5	
		646.3		449.7	
Ner	56 01	1375.6	133 15	745.5	
		480.1		293.7	
Clo	56 01	1593.6	133 15	749.9	
		262.1		289.2	
Stok	56 01	1836.9	133 15	785.3	
		18.8		253.7	

## Plane Table Positions

Object and description	Latitude	D. M.	Longitude	D. P.	Remarks.
Wear	56 02	157.3	133 15	827.7	
		1698.4		211.3	
'e	56 02	952.0	133 15	932.1	
		903.7		106.7	
Skeg	56 02	1267.2	133 16	27.3	
		588.5		1011.5	
Camp	56 02	1544.1	133 15	923.1	
		311.6		115.6	
Haus	56 02	1629.5	133 15	759.7	
		226.2		279.0	
Boat	56 02	1783.2	133 15	488.6	
		72.5		550.0	
Wy	56 02	1832.5	133 15	544.6	
		23.2		494.0	
Can	56 02	1841.4	133 15	831.0	
		14.3		207.4	
Bed	56 03	237.0	133 16	53.0	
		1618.7		985.3	
Sur	56 03	397.4	133 16	193.2	
		1458.3		845.1	
Din	56 03	478.3	133 16	391.8	
		1377.4		646.6	
Eat	56 03	621.4	133 16	584.8	
		1234.3		453.6	
Dark	56 03	1377.9	133 18	212.5	
		477.8		825.8	
Cat	56 03	945.4	133 17	935.9	
		910.3		102.5	
Wet	56 03	518.9	133 17	765.9	
		1336.8		272.6	
Hick	56 03	95.6	133 17	786.7	
		1760.1		251.8	
Ang	56 02	1631.4	133 17	789.7	
		224.3		248.9	
l ve	56 02	1364.3	133 18	155.5	
		491.4		883.2	
Ran	56 02	1021.6	133 18	19.9	
		834.1		1018.9	
Isle	56 02	765.3	133 17	755.2	
		1090.4		283.4	
Sound	56 02	448.2	133 17	708.7	
		1407.5		330.3	
Win	56 02	208.2	133 17	427.0	
		1647.5		612.0	
Sly	56 01	1776.9	133 17	286.9	
		78.8		752.1	
Group	56 01	1511.5	133 17	316.5	
		344.2		722.6	
Bend	56 01	1346.2	133 17	510.8	
		509.5		528.4	

## Plane Table Positions

Object and description	Latitude	D. M.	Longitude	D. P.	Remarks.
Sing	56 01	1030.1	133 17	599.0	
		825.6		440.3	
	56 01	901.2	133 17	717.0	
		954.5		322.7	
Sue	56 01	871.5	133 17	417.4	
		984.2		622.1	
Tom	56 01	547.5	133 17	531.8	
		1308.2		507.8	
Flush	56 01	151.1	133 17	281.8	
		1704.6		757.8	
Way	56 00	1724.3	133 17	221.5	
		131.4		818.1	
Tree	56 00	1604.1	133 17	399.6	
		251.5		640.0	
Vill	56 00	1577.4	133 17	509.8	
		278.3		529.8	
Sure	56 00	1205.0	133 17	770.2	
		650.7		269.5	
Be	56 00	998.6	133 17	807.5	
		857.1		232.2	

Plane Table Positions.

Name	Latitude	D. M.	Longitude	D. P.
Pin	56 00	935.7	133 18	831.5
		920.0		208.5
Nip	"	701.8	"	853.9
		1153.9		186.3
Coo	"	575.3	"	652.5
		1280.4		387.9
Hop	55 59	1811.6	133 17	481.6
		44.0		558.8



Plane Table Positions.

Name	Latitude	D. M.	Longitude	D. P.
Rat	56 04	187.1	133 17	28.2
		1668.6		1009.9
Cel	"	964.6	"	347.7
		891.1		690.2
Tar	"	1382.3	"	411.6
		473.4		626.2
Run	"	1800.8	133 18	948.3
		54.9		89.4
Tide	"	709.0	"	646.7
		1146.7		391.2
Cove	"	91.3	"	247.4
		1764.4		790.7

Hyd. Sheet No 4262

While this survey is still incomplete, the channel was well covered and only the two shoal spots described in report were found.

The four fathom spot a quarter of a mile north of  $\Delta$  "El", might have been further investigated.

The protracting and plotting of the sheet is well done.

The records are satisfactory except that no courses were noted on that portion of the work done by Launch No 3.

R. L. Johnston

COPY TO FIELD RECORDS.

April 26, 1923.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in  
volumes of sounding records for

HYDROGRAPHIC SHEET 4262

Locality: El Capitan Pass, S.E. Alaska

Chief of Party: J. J. Maher in 1922

Plane of reference is mean lower low water, reading  
ft. on tide staff at Devil Fish Bay, El Capitan Pass.

1.2

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
- ✓ 5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

*H. Hammer*  
at Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

WASHINGTON

June 20, 1923.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4262.

El Capitan Passage, Middle Part, Alaska.

Surveyed in 1922.

Chief of Party, T. J. Maher. Instructions dated February 25, 1922.

Surveyed by A. G. Katz and L. C. Wilder.

Protracted by H. E. Finnegan.

Soundings plotted by A. L. Shalowitz.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions except that the boats' courses were omitted in all the work done by Mr. Wilder.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions, except for certain areas that were not completed when work stopped for the season.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. Only the protracting was done by the field party.
7. The adjoining hydrography has not been completed, hence the agreement with overlapping surveys cannot be indicated.
8. As stated in the descriptive report certain areas on this sheet were not completed when field work was discontinued. These omissions should be supplied.

The center of the passage is free from indications of dangers but there are several shoals that should be dragged.

9. The character and scope of both the surveying and field drafting are excellent.
10. Reviewed by E. P. Ellis, June, 1923.

Report on additional work done on  
Hyd. sheet 4262 in 1923.

The soundings records were complete  
No additional descriptive report was  
made by the field party.

The protracting and plotting  
were satisfactory although the  
time interval was not carefully  
adhered to in a few places.

This additional work completed the  
sheet but a few additional lines  
might have been run south of  
O Vill and north of O Tom.

H. C. D. M. Croston.

# *Additional Work*

Statistics sheet No. 4262

Date, 1923	Letter	Volume	Positions	Soundings	Miles, st.	Vessel
October 11	a	1	230	403	13.8	# 3
12	b	1	211	434	13.3	
15	c	2	184	324	9.4	
16	d	2	16	29	1.4	
Total			641	1190	37.9	

The unit for soundings on this sheet is fathoms.

The automatic tide gauge was located at Deweyville,

El Capitan Pass, South East Alaska.

The plane of reference, reading on tide gauge is 13.1 Ft.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

April 30, 1924.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4262

Middle Part of El Capitan Pass, Alaska

Additional work surveyed in 1923

Instructions dated February 15, 1923

Chief of Party, T. J. Maher.

Surveyed by A. G. Katz.

Protracted by R. W. Knox.

Soundings plotted by A. W. Skilling.

Verified and inked by H. R. Edmonston.

1. The records conform to the requirements of the General Instructions except that no descriptive report was submitted.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The information was sufficient for drawing the usual depth curves.
6. The field plotting was completed to the extent prescribed by the General Instructions. The shoreline, rocks and ledges were carelessly done and contained numerous errors and omissions.
7. The junctions with adjacent sheets are satisfactory.
8. No further lead line surveying is required within the area covered by this sheet, but it should be dragged when opportunity affords.
9. The character and scope of the surveying were excellent. The field drafting also was excellent with the exception of the shoreline details.
10. Reviewed by E. P. Ellis, April, 1924.

April 4, 1924.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4262

Locality: El Capitan Pass, S.E. Alaska.

Chief of Party: T. J. Maher in 1923.

Plane of reference is mean lower low water reading  
13.1 ft. on ~~tide staff~~  
automatic gauge at Deweyville.

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## HYDROGRAPHIC TITLE SHEET

Referring only to positions plotted in brown ink.

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

*Additional Work*  
U. S. Coast and Geodetic Survey.

Register No. 4262

State . S. E. Alaska . . . . .

General locality . West coast of Prince of Wales Island

Locality . El Capitan Pass - middle part . . . . .

Chief of party . T. J. Maher . . . . .

Surveyed by . . . A. G. Katz . . . . .

Date of survey . October 16-18, 1923 . . . . .

Scale . . . . . 1:10 000 . . . . .

Soundings in . . . fathoms . . . . .

Plane of reference MLLW . . . . .

Protracted by . RWK ~~map~~ . Soundings in pencil by . AWS ~~sketching~~

Inked by . . . . . Verified by . . . . .

Records accompanying sheet (check those forwarded):

Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, 2 Boat sheets,

2 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet . . . . .

Remarks: This is additional work completing the sheet started in 1922.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3(7) 4262

State . . . . . Alaska  
General locality . . . West Coast of Prince of Wales Island  
                            S.R. Alaska  
Locality . . . . . El Capitan Pass - Middle Part  
Chief of party . . . T.J. Maher  
Surveyed by A.G. Katz and I.C. Wilder  
Date of survey . Nov. 20 - Nov. 25<sup>th</sup>, 1922  
Scale . . . . . 1:10,000  
Soundings in . . . Fathoms  
Plane of reference . . M.I.L.W.  
Protracted by H.E.F. . . Soundings in pencil by Shalowitz  
Inked by Johnston . . Verified by Johnston  
Records accompanying sheet (check those forwarded):  
Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, 2 Boat sheets,  
4 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.  
Data from other sources affecting sheet . . . . .

Remarks: